

[Manufacturing](#) | Michael Kanellos | January 1, 2010

1 Comments

Dow Chemical: One of the Next Green Giants?

The chemical company is going into its second century by focusing on sustainability.

Dow Chemical is going green.

The chemical giant, founded when William McKinley sat in the White House (1897), has embarked upon a multi-pronged strategy to capitalize on the demand for renewable energy and low-carbon alternatives to conventional products. It's an ever-growing list. In the last year, [Panasonic](#), [Samsung](#), [Taiwan Semiconductor Manufacturing Corp.](#) and [LG](#) have all ramped up their green strategies. Companies like [Siemens](#) and [Philips](#), meanwhile, spent millions on acquisitions in 2009 to expand their green portfolios. Although start-ups often garner the lion's share of green headlines, large, familiar outfits like these will likely play a large role in the industry as the industry moves from the PowerPoint stage to the factory floor.

What's is Dow's secret sauce in green markets? Material science, i.e. membranes, coatings and other difficult-to-manufacture items that require a lot of chemical know-how. Material science has traditionally been associated with semiconductors, but it will have a huge impact on green.

[Vinod Khosla](#) says materials constitutes one of the four core green markets (replacements for coal, oil substitutes, and energy efficiency are the other three.)

Last September, [Dow Corning](#), a joint venture between Dow and Corning, brought a silicone sealant originally devised for outer space solar panels to the conventional solar panel market. Silicone protects better than standard coatings, the company said, but also [increases factory output](#). In November, Dow signed a multimillion dollar, multi-year research alliance with [Caltech](#) to develop next generation solar technologies. Secretive [Alta Devices](#) (working on a next generation solar cell) and [Soliant](#) (concentrators) have come out of Caltech.

Next year, it will sell [copper indium gallium selenide \(CIGS\) solar roofing tiles](#). Initial customers for the tiles, developed in conjunction with [Global Solar](#), include [mass market home builders Lennar and Pulte Homes](#).

Later in the month, there will be Dow news too. The company is sponsoring Electric Avenue, the electric car hall at the North American International Auto Show taking place in Detroit next week. The exhibit will feature 20 cars. [Dow Kokam](#), a joint venture, will also discuss batteries for electric cars at the show.

Dow also wants a larger part of the water purification and desalination market, buying [Rohm & Haas](#) to help it expand. And we haven't even got into the green chemistry market being staked out by start-ups like [Genomatica](#), [Zeachem](#) and [LS9](#). Will rival [DuPont](#) be far behind?

We will have more on Dow in the near future, but figured we'd write this now in case you see some more Dow news yourself.